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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,438	06/28/2004	Hsuan-Ming Shih	88538.0002	2424

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EXAMINER	
CHOW, YUK	
ART UNIT	PAPER NUMBER
2629	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,438	SHIH, HSUAN-MING	
	Examiner	Art Unit	
	YUK CHOW	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-28 and 31-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-28 and 31-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 23-28 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taguchi et al.(Re. 33,740) in view of Landmeier (US 5,381,160).

As to **claim 23**, Taguchi discloses a touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer, including at least a display screen and a shell; wherein an induction layer is provided in the rear of the display screen, the output of the induction layer is connected to an induction control circuit, a display screen control circuit is also provided in the shell, characterized by:

the said induction layer (Fig. 2(150 and 160)) is the antenna array printed on the insulation membrane and arranged along the X, Y axes, therein the area enclosed by each lattice unit constitutes one induction cell (see Fig. 2, 130b and 130d are arranged along the x, y axes);

said induction layer consists of two layers (see Fig. 2, 150 on 130b constitutes one induction layer, 160 on 130d constitutes a second induction layer), and the induction cells on respective induction layers are set to interlace each other (see Fig. 2, 130b and 130d are cross one another).

However, Taguchi disclosure does not specifically teach insulation membrane is made by film material.

Landmeier discloses a see through digitizer with a clear conduction grid wherein teaches insulation membrane is made of film material (see Col. 5 line 3-Col. 5 line 22).

It would have been obvious to one ordinary skill in the art at the time of invention was made to use film material for insulation membrane as in Landmeier into position detecting device of Taguchi, because the thin size of the material allows the LCD panel to be view without interference and distortion (see Landmeier Col. 6 lines 49-62).

As to **claim 24**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 23, characterized by:

a shield layer (see Taguchi Fig. 2(110b)) is provided after the induction layer in order to enhance the anti-interference ability of the device.

As to **claim 25**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 23, characterized by:

a buffering layer (Taguchi Fig. 2(120e)) is also provided between the induction layer and the shield layer.

As to **claim 26**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 25, characterized by:

a space (see Taguchi Fig. 2, 120e and 120f constitute a space) is provided between the induction layer and the shield layer.

As to **claim 27**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 23, characterized by:

said induction layer is the antenna array formed by etching the copper-platinum covering the insulation membrane (antenna material would have been a design choice, since there isn't any significant advantage over one or other material).

As to **claim 28**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 23, characterized by:

said induction layer is an antenna array formed by the silver-plasm or the mixture material of the silver-plasm and the carbon-plasm which is printed on the insulation membrane (antenna material would have been a design choice, since there isn't any significant advantage over one or other material);

the said induction layer can be printed on one surface of the insulation membrane (see Taguchi Fig. 16(126)), and

there are two layers of insulation membrane in which one is overlaid on the other (see Fig. 16(127 and 128)).

As to **claim 31**, Taguchi and Landmeier disclose s the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 23, characterized by:

the said components of the induction control circuit are mounted on a printed substrate which is separated from the induction layer, the output of the antenna array of the induction layer is connected to the corresponding input terminal on the printed substrate by means of plug-in connection (see Landmeier Fig. 6(44, 46)).

As to **claim 32**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 31, characterized by:

the said output of the antenna array of the induction layer is positioned between a hard sheet and a printed substrate (see Landmeier Fig. 11, induction layer 22' is position a hard sheet 10 and 68);

a buffering layer (Fig. 8(40)) is provided between the hard sheet and the output of the antenna array;

the hard sheet, the buffering layer and the output of the antenna array are overlaid on the printed substrate by means of the screwing-conjunction (It would been a common technique to use screwing-conjunction for securely fastening layer together);

the output of the antenna array is connected with corresponding input terminal (see Landmeier Fig. 6(44,46) and Col. 6 lines 13-28).

As to **claim 33**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 32, characterized by:

the said printed substrate is the printed substrate of the display screen control circuit in the body of the display screen (see Fig 9 and 10).

As to **claim 34**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 32, characterized by:

the said printed substrate is the printed substrate of the display screen control circuit outside the body of the display screen, or a self contained unit, otherwise it is set on the main board of PC; the connection between them is achieved by line or cable (see Fig. 6(44,46) and Col. 6 lines 13-28).

As to **claim 35**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 23, characterized by:

the said induction control circuit is positioned outside the body, and connected to the body through the electrical connection means (see Taguchi Fig. 14);

the output of the antenna array of the induction layer is connected with the output interface of the induction layer by means of plug-in connection; an interface which can match the electrical connection means of the induction layer is provided on the control circuit (see Taguchi Fig. 1).

As to **claim 36**, Taguchi and Landmeier disclose the touch screen with built-in wire lattice electromagnetic induction layer according to claim 35, characterized by:

the said output interface of the induction layer and the interface of the control circuit is one of the following:

pin-type connection means (See Taguchi Fig. 11, connection between 100 and 301, 302).

As to **claim 37**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 23, characterized by:

a protecting layer (see Landmeier Fig. 8(58) is provided in the front of the said display screen.

As to **claim 38**, Taguchi and Landmeier disclose the touch control display screen with built-in membrane antenna array lattice electromagnetic induction layer according to claim 23, characterized by:

the said display screen is a liquid-crystal display screen (see Landmeier Fig. 9(10)).

Response to Arguments

3. Applicant's arguments with respect to claims 23-28 and 31-38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./
Examiner, Art Unit 2629

/Amare Mengistu/

Supervisory Patent Examiner, Art Unit 2629